

### DEPARTMENT OF TRANSPORTATION

[4910-EX-P]

**Federal Motor Carrier Safety Administration** 

[Docket No. FMCSA-2018-0321]

Parts and Accessories Necessary for Safe Operation; SmartDrive Systems, Inc.

**AGENCY:** Federal Motor Carrier Safety Administration (FMCSA), DOT.

**ACTION:** Notice of final disposition.

SUMMARY: The Federal Motor Carrier Safety Administration (FMCSA) announces its decision to grant SmartDrive System, Inc.'s (SmartDrive) application for a limited 5-year exemption from 49 CFR 393.60(e)(1) to allow an Advanced Driver Assistance Systems (ADAS) camera to be mounted lower in the windshield than is currently permitted. The Agency has determined that the placement of the SmartDrive ADAS camera lower in the windshield area would not have an adverse impact on safety, and that adherence to the terms and conditions of the exemption would likely achieve a level of safety equivalent to or greater than the level of safety provided by the regulation.

DATES: This exemption is effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER] and ending [INSERT DATE FIVE YEARS FROM DATE OF PUBLICATION IN THE FEDERAL REGISTER].

FOR FURTHER INFORMATION CONTACT: Mr. Luke Loy, Vehicle and Roadside Operations Division, Office of Carrier, Driver, and Vehicle Safety, MC-PSV, (202) 366-0676, Federal Motor Carrier Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590-0001.

Docket: For access to the docket to read background documents or comments submitted to notice requesting public comments on the exemption application, go to

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www.regulations.gov at any time or visit Room W12-140 on the ground level of the West Building, 1200 New Jersey Avenue, SE, Washington, DC, between 9 a.m. and 5 p.m., ET, Monday through Friday, except Federal holidays. The on-line Federal document management system is available 24 hours each day, 365 days each year. The docket number is listed at the beginning of this notice.

#### SUPPLEMENTARY INFORMATION:

### Background

FMCSA has authority under 49 U.S.C. 31136(e) and 31315 to grant exemptions from certain parts of the Federal Motor Carrier Safety Regulations (FMCSR). FMCSA must publish a notice of each exemption request in the **Federal Register** (49 CFR 381.315(a)). The Agency must provide the public an opportunity to inspect the information relevant to the application, including any safety analyses that have been conducted. The Agency must also provide an opportunity for public comment on the request.

The Agency reviews safety analyses and public comments submitted, and determines whether granting the exemption would likely achieve a level of safety equivalent to, or greater than, the level that would be achieved by the current regulation (49 CFR 381.305). The decision of the Agency must be published in the **Federal Register** (49 CFR 381.315(b)) with the reasons for denying or granting the application and, if granted, the name of the person or class of persons receiving the exemption, and the regulatory provision from which the exemption is granted. The notice must also specify the effective period and explain the terms and conditions of the exemption. The exemption may be renewed (49 CFR 381.300(b)).

## **SmartDrive's Application for Exemption**

SmartDrive applied for an exemption from 49 CFR 393.60(e)(1) to allow an ADAS camera to be mounted lower in the windshield than is currently permitted. A copy of the application is included in the docket referenced at the beginning of this notice.

Section 393.60(e)(1)(i) of the FMCSRs prohibits the obstruction of the driver's field of view by devices mounted on the interior of the windshield. Antennas and similar devices must not be mounted more than 152 mm (6 inches) below the upper edge of the windshield, and outside the driver's sight lines to the road and highway signs and signals. Section 393.60(e)(1)(i) does not apply to vehicle safety technologies, as defined in 390.5, including "a fleet-related incident management system, performance or behavior management system, speed management system, forward collision warning or mitigations system, active cruise control system, and transponder." Section 393.60(e)(1)(ii) requires devices with safety technologies to be mounted (1) not more than 100 mm (4 inches) below the upper edge of the area swept by the windshield wipers; or (2) not more than 175 mm (7 inches) above the lower edge of the area swept by the windshield wipers; and (3) outside the driver's sight lines to the road and highway signs and signals.

In its application, SmartDrive stated:

SmartDrive is making this request so that it becomes possible to introduce Advanced Driver Assistance Systems (ADAS) to our current vehicle safety platform. These new ADAS capabilities include forward collision warnings, short following distance warnings, lane detection and departure warnings, and active monitoring with real-time driver feedback.

This system operates like any other similar systems for which FMCSA has granted exemptions. ADAS requires that a camera be mounted to the upper center area of the windshield in an area where the windshield is swept by the windshield wipers to provide a clear view to the lane markings on the road and other objects in front of the vehicle.

This exemption will accommodate the ADAS camera and housing which is an integral part of our next-generation comprehensive vehicle safety system. The camera housing is approximately 3.71 inches wide by 5.2 inches tall and will be mounted in the

approximate center of the windshield with the bottom edge of the camera housing approximately 8 inches below the upper edge of the area swept by the windshield wipers. The camera is mounted outside of the driver[']s and passenger's normal sight lines to the road ahead, signs, signals, and mirrors. The location will allow for the optimal functionality of the advanced safety systems supported by the camera.

SmartDrive has piloted the ADAS camera and functionality and found that all drivers and passengers agreed that there was no noticeable obstruction to the normal sight lines to the road ahead, highway signs, signals or any mirrors.

The exemption would apply to all CMV operators utilizing SmartDrive ADAS camera systems. SmartDrive believes that the installation of the ADAS systems camera within 8 inches below the upper edge of the area swept by the windshield wipers will maintain a level of safety that is equivalent to, or greater than, the level of safety achieved without the exemption.

#### Comments

FMCSA published a notice of the application in the **Federal Register** on November 27, 2018, and asked for public comment (83 FR 60942). The Agency received comments from the National Tank Truck Carriers, Inc. (NTTC) and three individuals.

NTTC supports granting the application to allow the use of the SmartDrive ADAS system camera, stating that SmartDrive's application "falls within the spirit, if not the letter" of the mandate in Section 5301 of the Fixing America's Surface Transportation (FAST) Act that directed FMCSA to amend the FMCSRs to permit certain "vehicle safety technologies" to be mounted within the swept area of the windshield wipers. NTTC stated that "Windshield-mounted cameras provide well-documented safety benefits. FMCSA has granted applications for similar products before and has been directed to support this life-saving technology.

SmartDrive has developed a product that does not fit within FMCSA's pre-approved location on the windshield but does allow the driver an unobstructed view of the road, signs, signals, and mirrors. There is clearly no safety risk."

Two individuals also supported granting the application. One stated that "As long as the devices do not block the driver's view, past (above) the outer edge of the hood, they should not be a problem." The other stated that "For over 12 years SmartDrive has modeled a commitment to safety and a record of advancing technologies for the public good. In designing one of the smallest center-mounted ADAS cameras on the market, SmartDrive follows on similar systems for which FMCSA has granted exemptions and achieves the accuracy needed for a sophisticated computer vision camera along with the line of sight versatility required in today's commercial vehicle fleets."

One individual opposed the application, citing concerns that drivers need "the entire usable portion of the windshield in order to have [an] unbroken view of the constantly changing emergencies happening in any direction."

#### **FMCSA Decision**

FMCSA has evaluated the SmartDrive exemption application. The ADAS camera system housing is approximately 3.7 inches wide by 5.2 inches tall and will be mounted in the approximate center of the windshield. The bottom of the camera housing needs to be mounted approximately 8 inches below the top of the swept area of the windshield wipers to obtain the optimal functionality of the advanced safety systems supported by the camera.

The Agency believes that granting the temporary exemption to allow the placement of the ADAS camera system lower than currently permitted by the Agency's regulations will likely provide a level of safety that is equivalent to, or greater than, the level of safety achieved without the exemption because (1) based on the technical information available, there is no indication that the ADAS camera system would obstruct drivers' views of the roadway, highway signs and surrounding traffic; (2) generally, trucks and buses have an elevated seating position that greatly

improves the forward visual field of the driver, and any impairment of available sight lines would be minimal; and (3) the mounting location of the bottom edge of the camera housing approximately 8 inches below the top of the area swept by the windshield wipers and out of the driver's normal sightline will be reasonable and enforceable at roadside. In addition, the Agency believes that the use of SmartDrive ADAS system cameras by fleets is likely to improve the overall level of safety to the motoring public.

This action is consistent with previous Agency action permitting the placement of similarly-sized devices on CMVs outside the driver's sight lines to the road and highway signs and signals. FMCSA is not aware of any evidence showing that the installation of other vehicle safety technologies mounted on the interior of the windshield has resulted in any degradation in safety.

# Terms and Conditions for the Exemption

The Agency hereby grants the exemption for a 5-year period, beginning [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER] and ending [INSERT DATE FIVE YEARS FROM DATE OF PUBLICATION IN THE FEDERAL REGISTER].

During the temporary exemption period, motor carriers will be allowed to operate CMVs equipped with the SmartDrive ADAS camera system mounted in the approximate center of the windshield such that the bottom edge of the camera is not more than 8 inches below the upper edge of the swept area of the windshield wiper and outside the driver's sight lines to all mirrors, highway signs, signals, and view of the road ahead. The exemption will be valid for 5 years unless rescinded earlier by FMCSA. The exemption will be rescinded if: (1) motor carriers and/or commercial motor vehicles fail to comply with the terms and conditions of the exemption; (2) the exemption has resulted in a lower level of safety than was maintained before it was

granted; or (3) continuation of the exemption would not be consistent with the goals and

objectives of 49 U.S.C. 31136(e) and 31315(b).

Interested parties possessing information that would demonstrate that motor carriers

operating CMVs equipped with the SmartDrive ADAS camera system are not achieving the

requisite statutory level of safety should immediately notify FMCSA. The Agency will evaluate

any such information and, if safety is being compromised or if the continuation of the exemption

is not consistent with 49 U.S.C. 31136(e) and 31315(b), will take immediate steps to revoke the

exemption.

**Preemption** 

In accordance with 49 U.S.C. 31313(d), as implemented by 49 CFR 381.600, during the

period this exemption is in effect, no State shall enforce any law or regulation applicable

to interstate commerce that conflicts with or is inconsistent with this exemption with respect to a

firm or person operating under the exemption. States may, but are not required to, adopt the

same exemption with respect to operations in intrastate commerce.

Issued on: April 8, 2019.

Raymond P. Martinez,

Administrator.

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